

Date of Application, 30th July, 1888
Complete Specification Left, 27th Feb., 1889
Complete Specification Accepted, 30th Mar., 1889

A.D. 1888, 30th JULY. N° 10,977.

PROVISIONAL SPECIFICATION.

An Improved Chloride of Ammonium Inhaler.

JAMES EDWARD BRUNKER trading as Anderson & Adams of 68 Grafton Street Dublin Pharmaceutical Chemist do hereby declare the nature of this invention to be as follows :—

5 The novelty of this apparatus consists in the Ammonium Chloride fumes being produced by volatilization of the salt by means of heat.

A glass tube is supported upon a portable wooden stand. The heat applied beneath by means of a suitable lamp volatilizes a small quantity of Chloride of Ammonium Salt placed in the tube, and the fumes are drawn off by a suitable tube & mouth piece.

10 The fumes given out are perfectly neutral.

Dated this 28th day of July 1888.

J. E. BRUNKER.

COMPLETE SPECIFICATION.

An Improved Chloride of Ammonium Inhaler.

I, JAMES EDWARD BRUNKER, trading as Anderson and Adams of 68 Grafton Street Dublin, Ireland Pharmaceutical Chemist do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

This Invention has reference to a new or improved apparatus for the purpose of enabling the fumes of Chloride of Ammonium (or of other salts such as Bromoide of Ammonium and Iodide of Ammonium) to be inhaled direct from the salt—the methods and apparatus hitherto in use for this purpose admitting only of the production of such fumes by the reaction of Hydrochloric Acid, and Ammonium Gases from the solutions of same. 5 10

The Invention consists of a glass tube, or retort arranged in a suitably constructed wooden stand, into which Crystallized Ammonium Chloride, or other such salt is introduced, which by means of a Spirit Lamp is Volatilized and the fumes given off are inhaled through a suitable India rubber tube, and mouth piece.

In order that the said invention may be more readily understood I will describe the accompanying Drawings (scale about half size). 15

A is a bed plate of wood, or other suitable material on which are hinged the standards B, B so that they may be turned down for portable convenience.

Through apertures in these standards is passed the horizontal tube or retort C underneath which is placed the Spirit Lamp D. 20

The end of the tube, or retort to the right is full open while the opposite end has a conical opening to enable the flexible india rubber tube E to be readily attached thereto.

This India rubber tube is interrupted by a Glass Bulb F containing fine glass wool for the purpose hereinafter described and is provided at its free end with a mouth piece G. 25

The action of my invention may be briefly described thus

When it is desired to use the apparatus for the purpose for which it is designed, a quantity consisting of about ten, or fifteen grains of Crystallized Ammonium Chloride or other such salt is placed in the tube or retort C, immediately over the Spirit Lamp, the open end of the tube or retort is then lightly packed with a little cotton wool; and heat being now applied by means of the Lamp the salt is Volatilized and the fumes given off are inhaled direct through the flexible tube E—the fine glass wool in the bulb F being moistened with water moderates the fumes in passing from the glass tube to the mouth. 30 35

The fumes may be medicated by dropping an essential oil or other desired medication upon the cotton wool at open end of glass tube.

Brunker's Improved Chloride of Ammonium Inhaler.

Having now particularly described and ascertained the nature of my said invention and in what manner the same may be performed I declare that what I claim is

1st. In an inhaler, the bed plate A folding standards B, retort C, lamp D and
5 Glass Bulb F in combination with each other, and with the flexible tube as herein described.

2nd. In an inhaler, the glass tube or retort C, with its open end partially closed by a porous stopper, adapted to receive Crystallized Ammonium Chloride to be Volatilized in its interior and to allow the admission of air through the end as herein
10 specified.

3rd. The combination in the inhaler of the fumes of Pinol Encalyptol or analogous materials with the fumes of Chloride of Ammonium and with the vapour of water which has the effect of reducing the temperature of the final mixture substantially as herein specified and set forth.

15 Dated this 26th day of February 1889.

J. K. FAHIE & SON,
9, Westland Row, Dublin,
Agents.

LONDON : Printed for Her Majesty's Stationery Office,
By DARLING AND SON, LTD.

1889.



[This Drawing is a full-size reproduction of the Original.]



